



Security by Design

World Institute for Nuclear Security

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Security by design

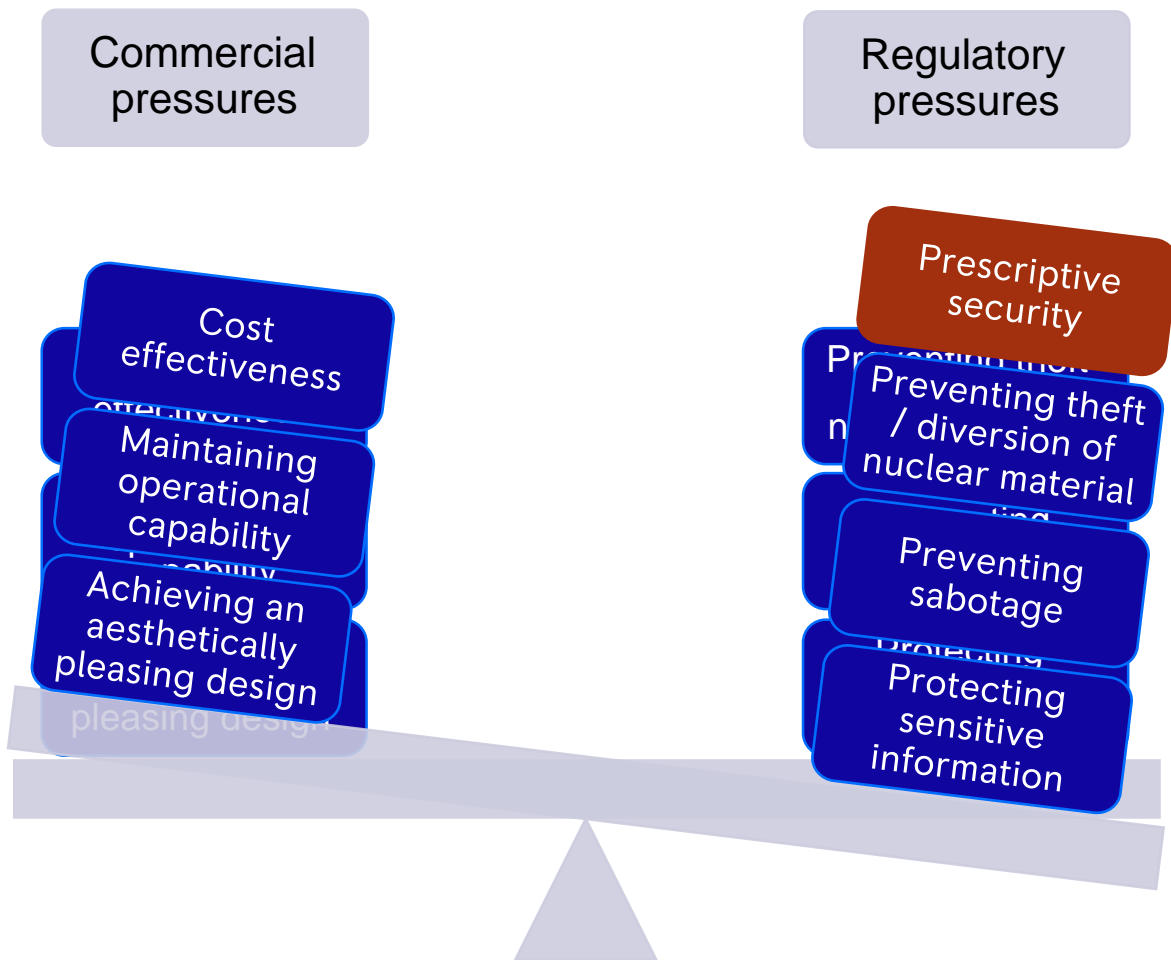
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Challenges and finding a balance

- Integrated approach
- Inherently secure
- Passively secure
- Evolving in-line with threat





Secure by design principles

When we say 'secure by design', what are we trying to achieve?

Integrated approach

Working with engineers and safety specialists to achieve an integrated security system

Inherently secure

Plant buildings, systems, landscaping and civil engineering are designed with security in mind

Passive security

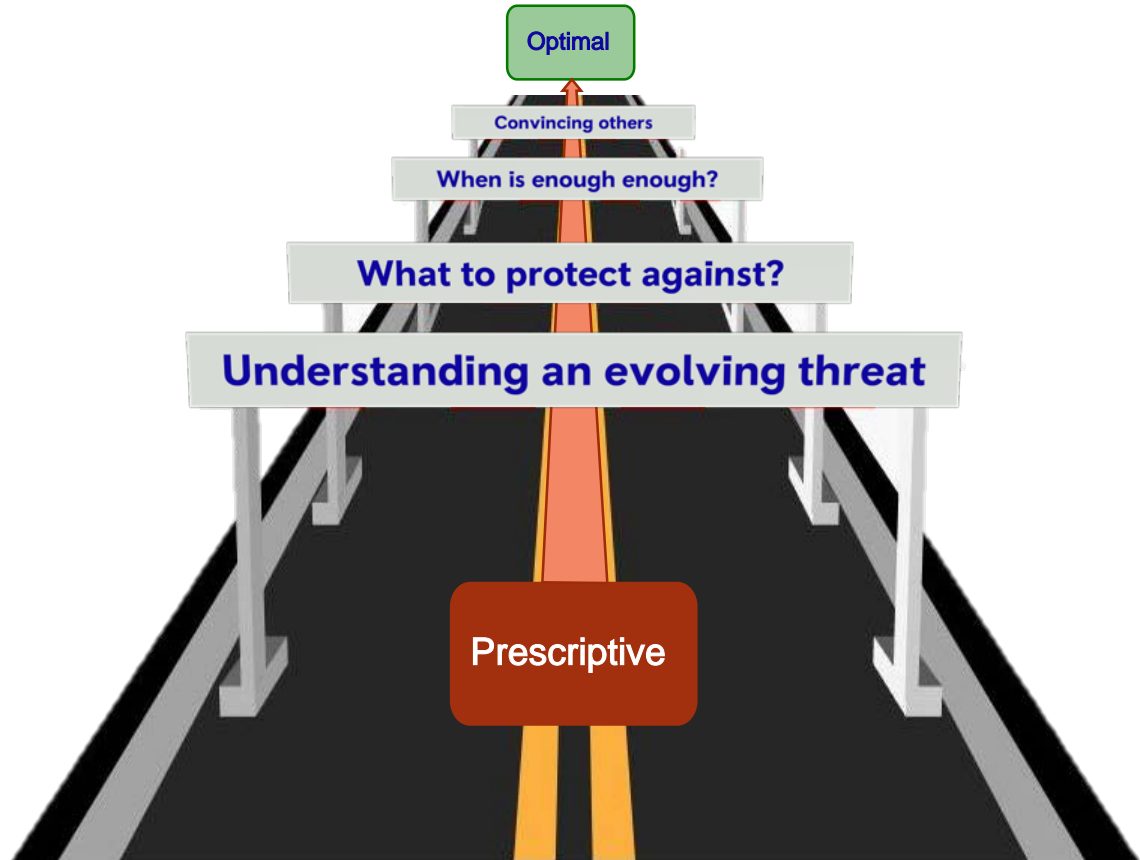
Reduced reliance on active security measures to counter a security event

Evolving response

The ability to provide a flexible response to changing threat levels, and an extensible security system to meet unknown future threats



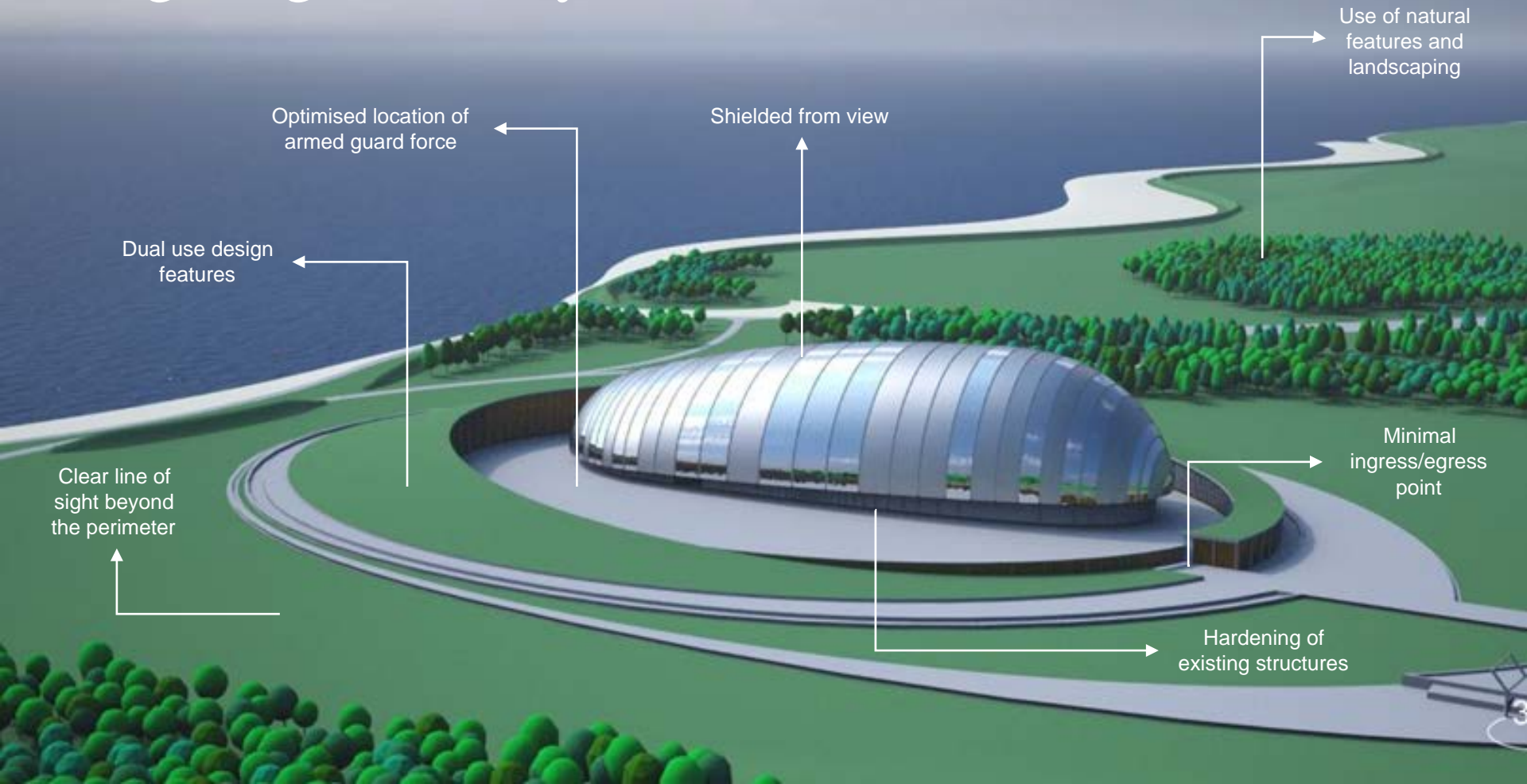
Roadmap to success



Opportunities



Designing security in



Use of natural features and landscaping

Shielded from view

Optimised location of armed guard force

Dual use design features

Minimal ingress/egress point

Clear line of sight beyond the perimeter

Hardening of existing structures



Integration of safety and security

- Working with engineers and safety specialists to achieve an integrated security system
- Maximising use of inherent and passive security features



Use of a common language for safety and security

Common processes and tools

Common functional requirements



Summary

Challenges and opportunities associated with Security by Design specific to SMRs

- Whilst there are challenges to having a smaller footprint, there are also some really positive opportunities.
- Security of a smaller site can be enhanced through integration with Safety and Engineering functions.
- It is important that regulatory requirements do not overshadow the need for a cost effective solution.
- The need to meet beyond design basis threats does not necessarily mean an increase in physical security measures.



Questions